

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY 2565 PLYMOUTH ROAD ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF AIR AND RADIATION

May 25, 2001

CCD-01-09 (LDV/LDT)

Dear Manufacturer:

Subject: Revisions to Vehicle Emission Control Information (VECI) Label

The introduction of vehicles certified to California LEV II or Federal Tier 2 emission standards requires that EPA make changes to the VECI label. Accordingly, the following changes become effective for the 2004 and later model year vehicles, and for any pre-2004 model year vehicles certified to LEV II or Tier 2 emission standards. The revisions described in this letter have been co-ordinated with the California Air Resources Board (CARB). The changes are:

- 1. Character positions 6 and 7, the applicable California and Federal emissions standards, respectively, in the current VECI bar code format will be moved to character positions 1 and 2 in the new format.
- 2. A new set of alpha-numeric codes apply to the new character positions 1 and 2. These codes identify the applicable California LEV II standards or the Federal Tier 2 standards.
- 3. A new coding system for correctly identifying vehicles certified on a chassis dynamometer or an engine dynamometer is specified for character position 3. These class definitions are a simplification of the current CARB Vehicle Emission Configuration bar coding requirements.
- 4. To harmonize Federal VECI labeling requirements with CARB, EPA is adding an optional 9<sup>th</sup> character to the bar code.

Table 1 presents the new format for the VECI label. Tables 2 and 3 present the new letter codes which identify the vehicle's applicable California or Federal emission standards, respectively. Table 4 describes the Federal emission standards which correspond to the bin numbers referenced in Table 3, including the multiple standards in bins 8, 9, and 10. Table 5 presents the new codes for the Class field, barcode character position three.

If you have any questions about this letter, please contact Martin Reineman by e-mail at reineman.martin@epa.gov or by telephone at 734-214-4430.

Sincerely,

Gregory A. Green, Director

Certification and Compliance Division
Office of Transportation and Air Quality

<u>Table 1</u>
New VECI Barcode Format

	2004 and Later Model Years				
Character Position	Field Description	Character Type			
1	California Emission Standards	Letter			
2	Federal Emission Standards	Letter			
3	Class	Number or Letter			
4	Wild Card	Number or Letter			
5	Combustion/fuel Type	Number or Letter			
6	Engine Displacement (liters)	Number			
7	Engine Displacement (liters)	Number			
8	Emission Control System	Letter			
9	Optional Character	Number or Letter			

Note: Changes for the 2004 MY and later also apply to pre-2004 MY LEV II and Tier 2 vehicles.

<u>Table 2</u> Character Position 1 - California Standards

Code		
A	LEV II	120K
В	ULEV II	120K
С	SULEV II	120K
D	ZEV	100K/120K
Е	LEV II	150K
F	ULEV II	150K
G	SULEV II	150K
Н	LEV II Interim	150K
I	ULEV II Interim	150K
J	SULEV II Interim	150K
K	LEV II Interim	120K
L	ULEV II Interim	120K
M	SULEV II Interim	120K
N	Tier 1	100K/120K
О	LEV I	100K/120K
P	ULEV I	100K/120K
Q	SULEV I	120K
R	LEV II, Option 1	120K
S	LEV II, Option 1	150K
T	LEV II, Option 1 Interim	120K
U	LEV II, Option 1 Interim	150K
V	Federal Vehicle, Legal for Sale in CA	
W	> 14K GVW	
X	Not Certified for CA	
Y	> 14K GVW, Clean NOx and/or PM	

Notes: 1) Interim = Standards for the first two years that rule applies.

- 2) The applicable useful life, 100K or 120K, depends on the vehicle type.
- 3) Codes T and U are interim NOx in-use standards which should be proposed in November 2001.

 $\underline{ \mbox{Table 3}}$  Character Position 2 - Federal Standards

Code	
	D:1
A	Bin 1
В	Bin 2
С	Bin 3
D	Bin 4
Е	Bin 5
F	Bin 6
G	Bin 7
Н	Bin 8
I	Bin 8a
J	Bin 9
K	Bin 9a
L	Bin 9b
M	Bin 10
N	Bin 10a
O	Bin 10b
P	Bin 10c
Q	Bin 11
R	
S	
T	
U	
V	
W	Engine Dynamometer
	Certification
X	Not Certified for Federal
	Standards
Y	

Table 4
Federal Standards

Bin No.	NOX g/mi	NMOG g/mi	CO g/mi	HCHO g/mi	PM g/mi	Notes
11	0.9	0.280	7.3	0.032	0.12	a, c
10c	0.6	0.280	6.4	0.027	0.08	a, b, d, f, h
10b	0.6	0.280	4.2	0.018	0.08	a, f, h
10a	0.6	0.230	6.4	0.027	0.08	a, b, h
10	0.6	0.156	4.2	0.018	0.08	a, h
9b	0.3	0.180	4.2	0.018	0.06	a, b
9a	0.3	0.130	4.2	0.018	0.06	a, e
9	0.3	0.090	4.2	0.018	0.06	a
8a	0.20	0.156	4.2	0.018	0.02	a, b, f
8	0.20	0.125	4.2	0.018	0.02	f
7	0.15	0.090	4.2	0.018	0.02	
6	0.10	0.090	4.2	0.018	0.01	
5	0.07	0.090	4.2	0.018	0.01	
4	0.04	0.070	2.1	0.011	0.01	
3	0.03	0.055	2.1	0.011	0.01	
2	0.02	0.010	2.1	0.004	0.01	
1	0.00	0.000	0.0	0.000	0.00	

Notes: a) This bin is deleted at end of 2006 model year for LDV/LDT, (end of 2008 model year for HLDTs and MDPVs).

- b) Higher NMOG, CO, and HCHO values apply for HLDTs and MDPVs only.
- c) This bin is only for MDPVs.
- d) Optional NMOG standard of 0.280 g/mi applies for qualifying LDT4s and qualifying MDPVs only.
- e) Optional NMOG standard of 0.130 g/mi applies for qualifying LDT2s only.
- f) Flex fueled Bin 10 vehicles can be certified to an NMOG standard of 0.195 (50K)/0.280 (full life) when operated on alcohol. Flex fueled Bin 8 vehicles can be certified to an NMOG standard of 0.125 (50K)/0.156 (full life), when operated on alcohol.
- g) The full useful life PM standards also apply at intermediate useful life.
- h) Intermediate life standards of this bin are also optional for diesels.
- i) Intermediate life standards are optional for vehicles certified to a useful life of 150,000 miles.

Table 5

## **Character Position 3 - Class**

## Chassis Certified

Code	Class	LVW (pounds)	ALVW (pounds)	GVW (pounds)
1	LDV/LDT1	≤3750		≤6000
2		>3750		≤6000
3			≤5750	6001 - 8500
4			>5750	6001 - 8500
5	MDPV			8501 - 10,000
6				8501 - 10,000
7				10,001 - 14,000
8	MDV3 - LEV1		5751 - 8500	
9	MDV4 - LEV1		8501 - 10,000	

Engine Dynamometer Certified

Code		GVW (pounds)
A		8501 - 14,000
В		>14,000
С		Urban Bus

Notes: a) Diesels are designated using character position 5 - Combustion/Fuel type.

- b) Codes 1, 2, 3, and 4 represent the new CA designation of LDT under LEV2 and final Tier 2 standards. While the FTP standards are the same for all vehicles < 8500 GVW, the SFTP standards exist as four separate standards, thus requiring four unique codes.
- c) Code 8 is used for MDV3 LEV1 and Code 9 is used for MDV4 LEV1 through 2006MY. Currently, no MDV5 or MDV1 vehicles exist.